representing nodes that join a plurality of branches of the tree structure using sequence of symbols, sequences of symbols for two of the nodes differing at a position that corresponds to a distance between the two nodes and a node that joins the two nodes to the tree structure;

allocating a CDMA code to a data link by selecting free nodes that are not directly connected in the tree structure to a node that is occupied;

determining a position in the sequence of symbols that corresponds to a difference from an occupied node and a sum of positions for occupied nodes, starting with a root of the tree structure; and

allocating a channel in the data link with a CDMA code that corresponds to a node with a predefined sum.

2. (Amended) The method as claimed in claim 1, wherein, in the tree structure, a distance between a node and the root corresponds to an increase in a spread factor of the CDMA code and to a reduction in a data rate for the link.

3. (Amended) The method as claimed in claim 1, wherein the predefined sum is a smallest of the sums of positions of occupied nodes.

4. (Amended) The method as claimed in claim 2, wherein the predefined sum for a link to a data rate which does not vary by more than a predetermined amount is a greatest of the sums of positions of occupied nodes.

5. (Amended) The method as claimed in claim 4, further comprising:

defining an increased possibility for a data rate of the link; and

selecting a node with a difference from an occupied node at a specific position, the specific position corresponding to the increased possibility.

6. (Amended) The method as claimed in claim 5, wherein the increased possibility is taken into account when selecting the node.

7. (Amended) The method as claimed in claim 2, wherein a plurality of channels with different CDMA codes are allocated, a desired data rate resulting from a totality of individual data rates of the CDMA codes.

8. (Amended) The method as claimed in claim 1, wherein the symbols are digital values, and from each node a branch branches off in a direction of the root and two branches branch off in an opposite direction.

9. (Amended) The method claimed in claim 8, wherein starting from the root of the tree structure, two nodes of outgoing branches of the tree structure are mapped using an additional "0" or "1" in the sequence of symbols.

10. (Amended) The method as claimed in claim 1, wherein the CDMA codes are orthogonal codes with a variable spread factor.

11. (Amended) The method as claimed in claim 1, wherein allocating a channel for a downward direction of a radio interface is performed in a broadband radio communications system.

12. (Amended) The method as claimed in claim 1, wherein at least one of a desired data rate and increased possibility for a data rate of the link is derived from an identifier of a mobile station.

13. (Amended) The method as claimed in claim 1, wherein at least one of a desired data rate and increased possibility for a data rate of the link is derived from a signaled request of a mobile station.

14. (Amended) A device for carrying out the method as claimed in claim 1 for a communications system with CDMA subscriber separation, the device comprising:

a storage device for storing the tree structure, the occupied nodes and the CDMA codes; and

a processing device for selecting a non-occupied node with a CDMA code and for allocating a channel with the CDMA code to a link.- -

Please add new independent claim 15, as follows:

--15. A method of allocating channels in a communications system in which code division multiple access (CDMA) codes are used to define channels between a transmitter and a receiver, the method comprising:

deriving a new CDMA code for a channel from other CDMA codes for other channels, the new CDMA code being derived based a tree structure that contains symbols that define the new CDMA code.--